

Amendments to the claims:

This listing of the claims will replace all prior versions and listings of the claims in the application:

1. (Currently Amended) A method of managing Quality of Service (QoS) in a communication network, the method comprising:

for each of a plurality of applications of a service provider which will communicate across the communication network, requesting a level of network communication QoS using QoS requests from the service provider;

allocating levels of network communication QoS to individual ones of the applications of the service provider in response to the QoS requests by evaluating at a network service manager of the communication network the QoS that is available in the communication network and by allocating from the network service manager a level of network communication QoS to a particular one of the applications of the service provider in response to a QoS request for the particular application and the evaluation of the QoS available in the communication network; and

managing, at the network service manager, network communication QoS that is provided by ~~a wide area~~ the communication network to network communications from the individual applications of the service provider in response to the network communication QoS levels allocated to the respective individual applications, wherein the communication network comprises a wide area network.

2. (Canceled)

3. (Previously Presented) The method of Claim 1, wherein requesting a level of network communication QoS using QoS requests from the service provider comprises generating a plurality of QoS requests, wherein each of the QoS requests is for a different one of the applications of the service provider.

4. (Previously Presented) The method of Claim 3, wherein allocating levels of network communication QoS to individual ones of the applications of the service provider in response to the QoS requests comprises allocating a level of network communication QoS to a particular one of the applications of the service provider in response to a QoS request for the particular application.

5. (Previously Presented) The method of Claim 3, wherein:
allocating levels of network communication QoS to individual ones of the applications of the service provider in response to the QoS requests comprises allocating a network capacity level for communications by a particular one of the applications of the service provider in response to a QoS request for the particular application; and
managing network communication QoS comprises constraining network communications by the particular one of the applications of the service provider to the allocated network capacity level.

6. (Canceled)

7. (Previously Presented) The method of Claim 3, wherein:
allocating levels of network communication QoS to individual ones of the applications of the service provider in response to the QoS requests comprises allocating a communication priority level for communications through the wide area network from a particular one of the applications of the service provider through the communication network in response to a QoS request for the particular application; and
managing network communication QoS comprises prioritizing network communications by the particular one of the applications of the service provider in response to the allocated communication priority level.

8. (Previously Presented) The method of Claim 1, wherein:
allocating levels of network communication QoS to individual ones of the applications of the service provider in response to the QoS requests comprises allocating an

allowed information delay level for communications through the wide area network from a particular one of the applications of the service provider in response to a QoS request for the particular application; and

managing network communication QoS comprises managing network communications by the particular one of the applications of the service provider in response to the allocated allowed information delay level.

9. (Previously Presented) The method of Claim 1, wherein:

allocating levels of network communication QoS to individual ones of the applications of the service provider in response to the QoS requests comprises allocating an allowed information loss rate for communications through the communication network by a particular one of the applications of the service provider in response to a QoS request for the particular application; and

managing network communication QoS comprises managing network communications by the particular one of the applications of the service provider in response to the allocated allowed information loss rate.

10. (Previously Presented) The method of Claim 1, wherein:

allocating levels of network communication QoS to individual ones of the applications of the service provider in response to the QoS requests comprises allocating an allowed packet size for communications through the communication network by a particular one of the applications of the service provider in response to a QoS request for the particular application; and

managing network communication QoS comprises constraining network communications by the particular one of the applications of the service provider in response to the allocated allowed packet size.

11. (Previously Presented) The method of Claim 1, wherein:

allocating levels of network communication QoS to individual ones of the applications of the service provider in response to the QoS requests comprises allocating a

Maximum Transmission Unit size for packets communicated through the communication network by a particular one of the applications of the service provider in response to a QoS request for the particular application; and

managing network communication QoS comprises constraining packet size in network communications by the particular one of the applications of the service provider in response to the allocated Maximum Transmission Unit size.

12. (Previously Presented) The method of Claim 1, wherein:
allocating levels of network communication QoS to individual ones of the applications of the service provider in response to the QoS requests comprises modifying a profile of information that is communicated through the communication network by a particular one of the applications of the service provider in response to a QoS request for the particular application.

13. (Cancelled).

14. (Currently Amended) The method of Claim [[13]] 1, wherein the network service manager comprises a DSL service manager.

15. (Currently Amended) The method of Claim [[13]] 1, wherein evaluating at a network service manager the QoS available in the network comprises validating the QoS request for the particular application of the service provider.

16. (Original) The method of Claim 15, wherein validating the QoS request comprises comparing the QoS request to a DSL session data store.

17. (Original) The method of Claim 1, further comprising:
communicating the QoS request in a data packet through the communication network;
and
evaluating the QoS request based on information in a known field in the data packet.

18. (Original) The method of Claim 17, further comprising:
identifying a protocol ID in the known field of the data packet; and
evaluating the QoS request based on the identified protocol ID.
19. (Original) The method of Claim 17, further comprising:
identifying a source address and/or a destination address in the known field of the data packet; and
evaluating the QoS request based on the identified source address and/or the destination address.
20. (Original) The method of Claim 17, further comprising:
identifying a source port number and/or a destination port number in the known field of the data packet; and
evaluating the QoS request based on the identified source port number and/or a destination port number.
21. (Previously Presented) The method of Claim 1, wherein allocating the requested level of network communication QoS to the service provider comprises notifying a broadband remote access server of the levels of network communication QoS allocated to particular applications of the service provider.
22. (Previously Presented) The method of Claim 1, wherein allocating the requested level of network communication QoS to the service provider comprises notifying a routing gateway of the levels of network communication QoS allocated to particular applications of the service provider.
23. (Previously Presented) The method of Claim 1, further comprising notifying the individual applications of the service provider of the levels of network communication QoS that have been allocated thereto.

24. (Currently Amended) A computer program product for managing Quality of Service (QoS) in a communication network, the computer program product comprising program code embodied in a computer-executable medium, the computer program code comprising:

service provider program code that when executed by a processor is configured to request a level of network communication QoS for each of a plurality of applications of a service provider which will communicate across the communication network using QoS requests from the service provider;

QoS allocation program code that when executed by a processor of a network service manager of the communication network is configured to allocate levels of network communication QoS to individual ones of the applications of the service provider in response to the QoS requests by evaluating at the network service manager the QoS that is available in the communication network and by allocating from the network service manager a level of network communication QoS to a particular one of the applications of the service provider in response to a QoS request for the particular application and the evaluation of the QoS available in the communication network, and; and

~~QoS network management program code that when executed by a processor is configured to manage network communication QoS that is provided by a wide area~~ the communication network to network communications from the individual applications of the service provider in response to the network communication QoS levels allocated to the respective individual applications, wherein the communication network comprises a wide area network.

25. (Canceled)

26. (Previously Presented) The computer program product according to Claim 24, wherein the QoS allocation program code when executed by a processor is configured to allocate a network capacity level for communications by a particular one of the applications of the service provider in response to a QoS request for the particular application, and the

QoS network management program code when executed by a processor is configured to restrict communications by the particular one of the applications through the communication network to the allocated network capacity level.

27. (Previously Presented) The computer program product according to Claim 24, wherein the QoS allocation program code when executed by a processor is configured to allocate a network communication priority level for communications by a particular one of the applications of the service provider through the communication network in response to a QoS request for the particular application, and the QoS network management program code when executed by a processor is configured to prioritize communications by the particular one of the applications through the communication network in response to the allocated communication priority level.

28. (Previously Presented) The computer program product according to Claim 24, wherein the QoS network management program code when executed by a processor is configured to shape information flow from a particular one of the applications of the service provider through the communication network in response to the QoS request for the particular application.

29. (Previously Presented) The computer program product according to Claim 24, further comprising program code that when executed by a processor is configured to validate the QoS request for a particular one of the applications of the service provider by comparing the QoS request to a DSL session data store.

30. (Canceled)

31. (Previously Presented) The computer program product according to Claim 24, further comprising program code that when executed by a processor is configured to identify an application program of the service provider that is associated with the QoS request, and is configured to evaluate the QoS request based on the identified application program.

32. (Previously Presented) The computer program product according to Claim 24, further comprising program code that when executed by a processor is configured to notify a broadband remote access server of the levels of network communication QoS allocated to particular applications of the service provider.

33. (Previously Presented) The computer program product according to Claim 24, further comprising program code that when executed by a processor is configured to notify a routing gateway of the levels of network communication QoS allocated to particular applications of the service provider.

34. (Previously Presented) A communication system comprising:
a service provider;
an application framework infrastructure;
an access network communicatively coupling the service provider and the application framework infrastructure;
a plurality of routing gateways; and
a wide area network that communicatively couples the application framework infrastructure and the plurality of routing gateways, wherein the service provider is configured to request a level of network communication QoS for each of a plurality of applications of the service provider which will communicate across the wide area network using QoS requests from the service provider, wherein the application framework infrastructure is configured to allocate levels of network communication QoS to individual ones of the applications of the service provider in response to the QoS requests, and wherein the routing gateways manage network communication QoS that is provided to network communications through the wide area network by individual ones of the applications of the service provider in response to the allocated levels of network communication QoS.

35.-36. (Canceled)

37. (Previously Presented) The communication system of Claim 34, wherein the application framework infrastructure is configured to identify at least one of the plurality of routing gateways that communicates with the applications of the service provider, and is configured to notify the identified at least one of the plurality of routing gateways of the levels of network communication QoS allocated to particular applications of the service provider.

38. (Previously Presented) The communication system of Claim 34, further comprising a broadband remote access server, wherein the application framework infrastructure is configured to notify the broadband remote access server of the levels of network communication QoS allocated to particular applications of the service provider.

39. (Canceled)

40. (Currently Amended) A method of managing Quality of Service (QoS) in a communication network, the method comprising:

allocating a different network communication QoS level to each one of a plurality of applications of a service provider by evaluating at a network service manager of the communication network the QoS that is available in the communication network and by allocating from the network service manager a level of network communication QoS to a particular one of the applications of the service provider in response to a QoS request for the particular application and the evaluation of the QoS available in the communication network; and

managing, at the network service manager, network communication QoS that is provided by ~~a wide area~~ the communication network to network communications from the individual ones of the applications of the service provider in response to the network communication QoS levels allocated to the respective individual applications, wherein the communication network comprises a wide area network.

41. (Currently Amended) A method of managing Quality of Service (QoS) in a communication network, the method comprising:

allocating a different network communication QoS level to each one of a plurality of IP addresses associated with different applications of a service provider by evaluating at a network service manager of a communication network the QoS that is available in the communication network and by allocating from the network service manager a level of network communication QoS to the IP addresses associated with particular ones of the applications of the service provider in response to a QoS request for the particular application and the evaluation of the QoS available in the communication network; and

managing, at the network service manager, network communication QoS that is provided by ~~a wide area~~ the communication network to network communications from individual ones of the applications in response to the network communication QoS levels allocated to the associated IP addresses, wherein the communication network comprises a wide area network.